

I claim:

1. A method for detecting unauthorized signal usage in a content delivery network, comprising the steps of:
acquiring at least two signal usage records for a receiver of said content;
evaluating said at least two signal usage records for indicia of usage of a combination of signals not
normally authorized on said receiver; and
detecting unauthorized signal usage upon said at least two signal usage records being consistent with
said indicia.
2. The method according to claim 1, wherein said indicia include use at said receiver of at least two signals each
of which is only normally authorized for use in mutually distinct geographic locations.
3. The method according to any one of claims 1 or 2, wherein usage of each said at least two signals is associated
with a geographic blackout region, wherein geographic locations in which usage is normally authorized for any
one of said at least two signals by reference to its respective blackout region is exclusive from geographic
locations in which usage is normally authorized for any one other of said at least two geographic blackout
regions associated with every other of said at least two signals.
4. The method according to any one of claims 1 to 3, further comprising disabling said receiver upon detecting
unauthorized signal usage at said receiver.
5. The method according to claim 4, wherein at least one of the steps of acquiring at least two signal usage
records, evaluating said at least two usage signal records, detecting unauthorized signal usage and disabling said
receiver is performed at a different time than in immediate succession to each other of the said steps.
6. The method according to claim 5, wherein the steps of acquiring at least two signal usage records, evaluating
said at least two usage records, detecting unauthorized signal usage and disabling said receiver are performed by
said receiver.
7. The method according to claim 5, wherein said content delivery network includes a conditional access system
in communication with said receiver, and the steps of acquiring at least two signal usage records, evaluating said
at least two signal usage records, detecting unauthorized signal usage and disabling said receiver are performed
by said conditional access system.
8. The method according to claim 5, wherein said content delivery network includes a conditional access system
in communication with said receiver, and said receiver performs at least one of the steps of acquiring at least two
signal usage records, evaluating said at least two signal usage records, detecting unauthorized signal usage and
disabling said receiver, and the conditional access system performs a said step other than the said at least one of
the steps.
9. The method according to claim 5, wherein said receiver is associated with an interactive television system.
10. The method according to any one of claims 2 and 3, wherein the said steps of evaluating said at least two
signal usage records and detecting unauthorized signal usage are performed by at least one of said receiver, an
advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a
parental control system, in each case being connected to said content delivery network.

11. The method according to claim 1, wherein said indicia include indicia of concurrent usage of two or more pay-per-usage signals.

12. The method according to claim 11, wherein said indicia of concurrent usage of two or more pay-per-usage signals include indicia of usage of said two or more pay-per-usage signals within a predetermined period of time.

5 13. The method according to claim 11, wherein said indicia of concurrent usage of said two or more pay-per-usage signals include indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals.

10 14. The method according to claim 11, wherein said indicia of concurrent usage of said two or more pay-per-usage signals include indicia of recording of at least one of said two or more pay-per-usage signals while another of said two or more pay-per-usage signal is being used.

15. The method according to claim 11, wherein said indicia of concurrent usage of said two or more pay-per-usage signals include indicia of multi-channel presentation of said two or more pay-per-usage signals.

16. The method according to claim 15, wherein said indicia of multi-channel presentation include presentation of said two or more pay-per-usage signals in an electronic program guide.

15 17. The method according to any one of claims 11 to 16, further comprising disabling said receiver in said content delivery network upon detecting unauthorized signal usage at said receiver.

20 18. The method according to claim 17, wherein at least one of the said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver is performed at a different time than in immediate succession to each other of the said steps.

19. The method according to claim 18, wherein said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver are performed by said receiver.

25 20. The method according to claim 18, wherein said content delivery network includes a conditional access system in communication with said receiver, and said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting said unauthorized signal usage and disabling said receiver are performed by said conditional access system.

30 21. The method according to claim 18, wherein said content delivery network includes a conditional access system in communication with said receiver, and said receiver performs at least one of said steps of acquiring at least two signal usage records, evaluating said at least two signal usage records, detecting unauthorized signal usage and disabling said receiver, and the conditional access system performs a said step other than the said at least one of said steps.

22. The method according to claim 18, wherein said receiver is associated with an interactive television system.

35 23. The method according to any one of claims 11 to 16, wherein the said step of evaluating said at least two signal usage records and detecting unauthorized signal usage are performed by at least one of said receiver, an

advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network.

24. A method for controlling unauthorized signal usage in a content delivery network, the method comprising the steps of:

- 5 acquiring geographic indicia for a receiver of said content, said geographic indicia identifying a geographic location associated with said receiver;
 acquiring at least one signal usage record for said receiver;
 evaluating said at least one signal usage record for indicia of usage of at least one signal not normally authorized on said receiver; and
- 10 detecting unauthorized signal usage upon said at least one signal usage record having indicia of usage of a signal not normally authorized for usage in the said geographic location.
25. The method according to claim 24, wherein said indicia of usage of said at least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic blackout region which does not normally permit usage of the signal in the geographic location of said receiver.
- 15 26. The method according to claim 24, wherein said geographic indicia comprise data associated with the time zone of the said geographic location.
27. The method according to claim 24, wherein said geographic indicia comprise data associated with a global positioning system.
28. The method according to claim 24, wherein said geographic indicia comprise data associated with the postal
- 20 code of the said geographic location.
29. The method according to any one of claims 24 to 28, further comprising disabling said receiver in said content delivery network upon detecting unauthorized signal usage at said receiver.
30. The method according to claim 29, wherein at least one of said steps of acquiring a geographic indicia, acquiring at least one usage signal, evaluating said at least one usage record, detecting unauthorized signal usage
- 25 and disabling said receiver is performed at a different time than in immediate succession to each other of the said steps.
31. The method according to claim 20, wherein said steps of acquiring a geographic indicia, acquiring at least one record, evaluating said at least one usage record, detecting unauthorized signal usage and disabling said receiver are performed by said receiver.
- 30 32. The method according to claim 20, wherein said content delivery network includes a conditional access system in communication with said receiver, and said steps of acquiring a geographic indicia, acquiring at least one record, evaluating said at least one usage record, detecting unauthorized signal usage and disabling said receiver are performed by said conditional access system.
33. The method according to claim 20, wherein said content delivery network includes a conditional access
- 35 system in communication with said receiver, and said receiver performs at least one of said steps of acquiring a geographic indicia, acquiring at least one record, evaluating said at least one usage record, detecting

unauthorized signal usage and disabling said receiver, and the conditional access system performs a said step other than the said at least one of said steps.

34. The method according to claim 20, wherein said receiver is associated with an interactive television system.

35. The method according to any one of claims 24 to 28, wherein the said step of evaluating said at least one

5 usage record is performed by at least one of said receiver, an advertising management system, a blackout control subsystem, a conditional access system, a multiplexer, and a parental control system, in each case being connected to said content delivery network.

36. The method of claim 1, further comprising acquiring a geographic indicia for said receiver to identify a geographic location associated with the receiver, and wherein said indicia of usage include at least two of:

10 use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations;

use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver; and

concurrent usage of two or more pay-per-usage signals.

15 37. A system for detecting unauthorized signal usage in a content delivery network, comprising:

a record acquisition module for acquiring at least two signal usage records for a receiver of said content;

a data set of indicia of usage of a combination of signals not normally authorized on said receiver; and

an evaluation module for evaluating said at least two signal usage records against said indicia, wherein unauthorized signal usage is detected upon said at least two signal usage records being consistent with said
20 indicia.

38. The system for controlling unauthorized signal usage of claim 37, further comprising a disabling module for disabling said receiver upon detecting unauthorized signal usage at said receiver.

39. The system for controlling unauthorized signal usage of claim 38, wherein said record acquisition module, evaluation module and disabling module each executes at a different time than in immediate succession to each
25 other.

40. The system for controlling unauthorized signal usage of claim 39, wherein said record acquisition module, data set of indicia, evaluation module, and disabling module are associated with at least one network element in said content delivery network.

41. The system for controlling unauthorized signal usage of claim 40, wherein one of said at least one network
30 element is any one of said receiver, an advertising management system, a blackout control system, a conditional access system, a multiplexer and a parental control system.

42. The system for controlling unauthorized signal usage of claim 41, wherein said indicia include use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations.

35 43. The system for controlling unauthorized signal usage of claim 42, wherein usage of each said at least two signals is associated with a geographic blackout region, wherein geographic locations in which usage is normally

authorized for any one of said at least two signals by reference to its respective blackout region is distinct from geographic locations in which usage is normally authorized for any one other of said at least two geographic blackout regions associated with every other of said at least two signals.

44. The system for controlling unauthorized signal usage of claim 41, wherein said indicia include concurrent
5 usage of two or more pay-per-usage signals.

45. The system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of two or more pay-per-use signals include indicia of usage of said two or more pay-per-usage signals within a predetermined period of time.

46. The system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of
10 said two or more pay-per-usage signals include indicia of picture-in-picture presentation of at least two of said two or more pay-per-usage signals.

47. The system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of said two or more pay-per-usage signals include indicia of recording of at least one of said two or more pay-per-usage signals while another of said two or more pay-per-usage signal is being used.

48. The system for controlling unauthorized signal usage of claim 44, wherein said indicia of concurrent usage of
15 said two or more pay-per-usage signals include indicia of multi-channel presentation of said two or more pay-per-usage signals.

49. The system for controlling unauthorized signal usage of claim 44, wherein said indicia of multi-channel presentation include presentation of said two or more pay-per-usage signals in an electronic program guide.

50. The system for controlling unauthorized signal usage of claim 41, wherein said acquisition module further
20 acquires a geographic indicia for said receiver to identify a geographic location associated with said receiver, and said indicia include indicia of usage of a signal not normally authorized for usage in the geographic location of said receiver.

51. The system for controlling unauthorized signal usage of claim 50, wherein said indicia of usage of said at
25 least one signal not normally authorized on said receiver include indicia of usage corresponding to a signal controlled by a geographic blackout region which does not normally permit usage of the signal in the geographic location of said receiver.

52. The system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise data associated with the time zone of the said geographic location.

53. The system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise
30 data associated with a global positioning system.

54. The system for controlling unauthorized signal usage of claim 50, wherein said geographic indicia comprise data associated with the postal code of the said geographic location.

55. The system for controlling unauthorized signal usage of claim 41, wherein said acquisition module further
35 acquires a geographic indicia associated with said receiver, and said indicia include at least two of:

use at said receiver of at least two signals each of which is only normally authorized for use in mutually distinct geographic locations;

use at said receiver of a signal not normally authorized for usage in the geographic location associated with said receiver; and

5 concurrent usage of two or more pay-per-usage signals.